The following documents are part of the supplementary materials of “Elementary Effects for models with dimensional inputs of arbitrary type and range: scaling and trajectory generation”.

1. elementaryEffects.rgg
2. EE\_TestModel\_main.rgg
3. Comparing\_Sampling\_Strats.xlsx
4. Supplementary\_information.pdf

1. elementaryEffects.rgg

Contains the bulk of the code for executing an EE analysis. Please note this file is an .rgg file, which is an extension of Java (see Kniemeyer, 2008). We plan to apply the EE analysis to our functional-structural plant model, which runs on the GroIMP-platform (Hemmerling et al, 2008) which makes use of the RGG language. In practice, this file contains solely Java code, so potential users can freely copy/paste parts of the code for use in their own implementations.

Further details on how to initiate and run this code can be found within the file.

2. EE\_TestModel\_main.rgg

Is the main file for applying the different variants of the analysis to the test functions in the paper and establishes the connection with the GroIMP platform. This file contains GroIMP/RGG-specific syntax.

3. Comparing\_Sampling\_Strats.xlsx

Spreadsheets with all simulation results and plots. These include a number of results that are not presented in the paper, such as the effect of a different shift in the QR-sequence.

4. Supplementary\_information.pdf

Additional information regarding discrepancy (Section S1) and Sobol total sensitivity indices (Section S2)

References:

O. Kniemeyer. Design and Implementation of a Graph Grammar Based Language for Functional-Structural Plant Modelling. Doctoral thesis, 2008.

R. Hemmerling et al. The rule-based language XL and the modelling environment GroIMP illustrated with simulated tree competition. Functional Plant Biology,35:9–10, 2008.